

Date: Tuesday, 15/07/2008 4:12:14 PM
 User: Julie Lecocq

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	TUBE ASSEMBLY
Job Number :	40520		
Estimate Number :	10429		
P.O. Number :		Part Number :	D3304043
This Issue :	15/07/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D3304 REV. B
First Issue :	1/1	Project Number :	N/A
Previous Run :	29924	Drawing Revision :	B
Type :	MACHINED PARTS	Material :	
Written By :		Due Date :	31/07/2008
Checked & Approved By :	<u>JW 08.7.16</u>	Qty:	1
Comment :	Est: D 04.11.26 Revised Step 7 KJ/JLM	Um:	Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M304TR0875W065	SS TUBING
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Comment: Qty.: 1.9469 f(s)/Unit Total : 1.9469 f(s)

Material: AISI 304/316 SS tubing 0.875" x 0.065" wall
 (M304TR0.875W.065)

Batch: M16258

J.F. 08/07/17 ①

2.0	HARDINGE	HARDINGE CNC LATHE SMALL
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Comment: HARDINGE CNC LATHE SMALL

- 1- Cut blank: 22.00" as per Dwg D3304
- 2- Turn as per Folio FA458 and Dwg D3304
- 3- Deburr

J.F. 08/07/17 ①

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

J.F. 08/07/17 ①

4.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

J.F. 08/07/17 ①

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1

- 1- Form as per Dwg D3304
- Ensure that bend radius does not fall into straight section using DT8756.
- 2- Drill as per Dwg D3304 using drill Jig D3304-T1
- 3- Cut tube to length as per Dwg D3304
- 4- Deburr

FF 08-07-25 ①

FF 08-07-28 ①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 15/07/2008 4:12:14 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 40520

Part Number: D3304043

Job Number:



Seq. #: Machine Or Operation: Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/07/2008 (X)

7.0

D33047

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Bracket

Pick:

Qty Part Number Description Batch

1 D3304-7 Bracket

B25067 ✓

Cpl 08-07-31

(X1)

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE



Comment: LARGE FABRICATION RESOURCE 1

Weld bracket as per Dwg D3304 and QSI 004 using DT8775

Cpl 08-07-31 (X1)

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

QC5 S 08/08/01

QC9 PD 08-08-01

10.0

POWDER COATING

POWDER COATING



M 106442



(X1)

Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

*1:50
320 °F
2:20*

m.l 08/08/05

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

ms

08-08-05 (X1)

12.0

BLBS0016

PIP PIN



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

PIP PIN

Pick:

Qty Part Number Description Batch

1 BLBS-0016 Pip Pin

M103178

C 8/8/05 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 15/07/2008 4:12:14 PM
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 40520

Part Number: D3304043

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

CBL460

Loop Sleeve



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Loop Sleeve

Pick:

Qty	Part Number	Description
2	CBL-460	Loop Sleeve

Batch

M157234

[Signature]

14.0

CBL1240

Cable



Comment: Qty.: 1.0416 f(s)/Unit Total: 1.0416 f(s)

Cable

Pick:

Qty	Part Number	Description
12.5"	CBL-1240	Cable

Batch

M157234

[Signature] 8/8/6 ①

15.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble lanyard and pip pin as per Dwg D3304

Identify as D3304-043

SAD 08/08/07 ②

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/08/07 ②

17.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N as per Dwg using a permanent fine point marker, then Stock

Location: *ST*

MF 08-08-07

18.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/08/08

Job Completion



MF 08-08-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector



Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

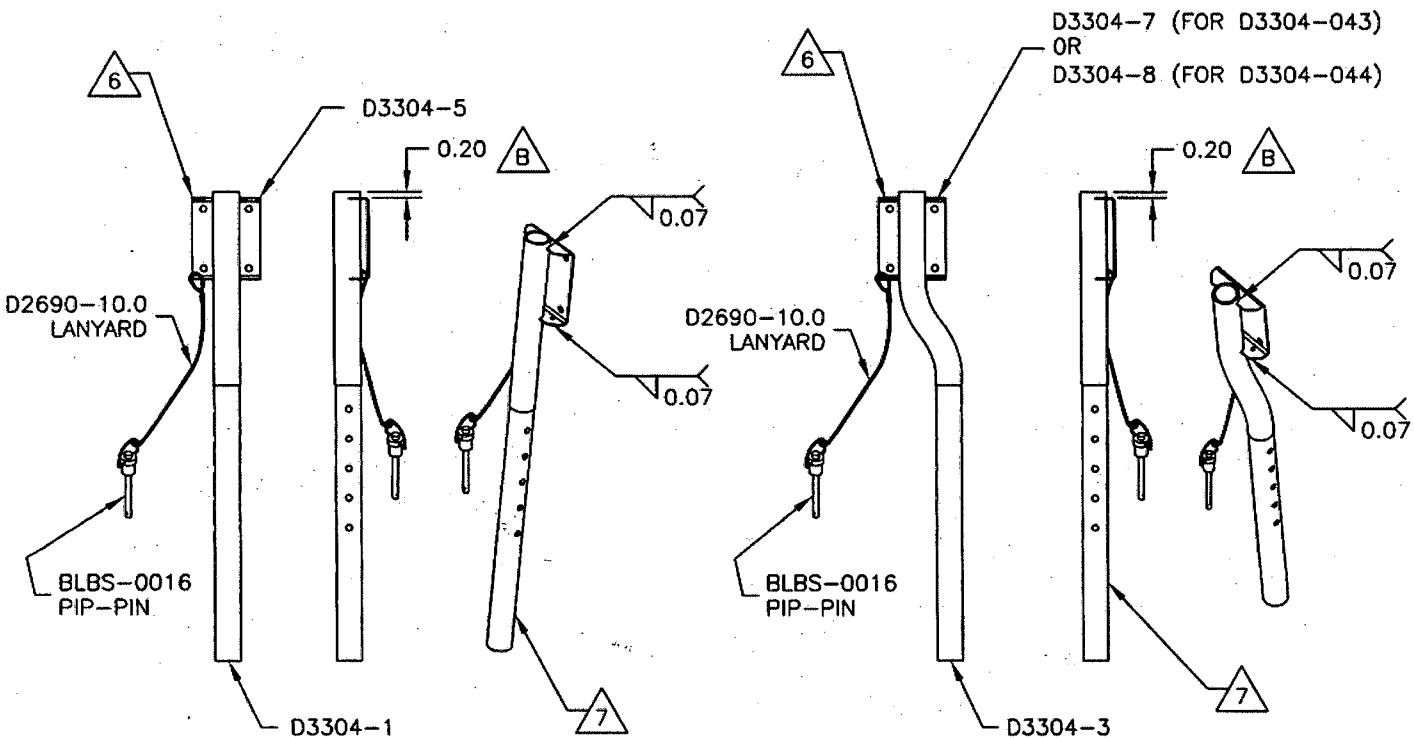
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	RF	DRAWN BY	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED		APPROVED		DRAWING NO.	D3304
DATE	05.07.15	TITLE	TUBE ASSEMBLY	REV. B	SHEET 1 OF 4
A	04.08.18	SCALE	1:6		
B	05.07.15	NEW ISSUE	UPDATE DIMENSIONS; ADD D3304-7/-8		



D3304-041 TUBE ASSEMBLY

D3304-044 TUBE ASSEMBLY (SHOWN)
D3304-043 OPPOSITE

03304-041/-043/-044 NOTES:

- 1) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"
- 7) IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

RELEASED
JUL 11 1985

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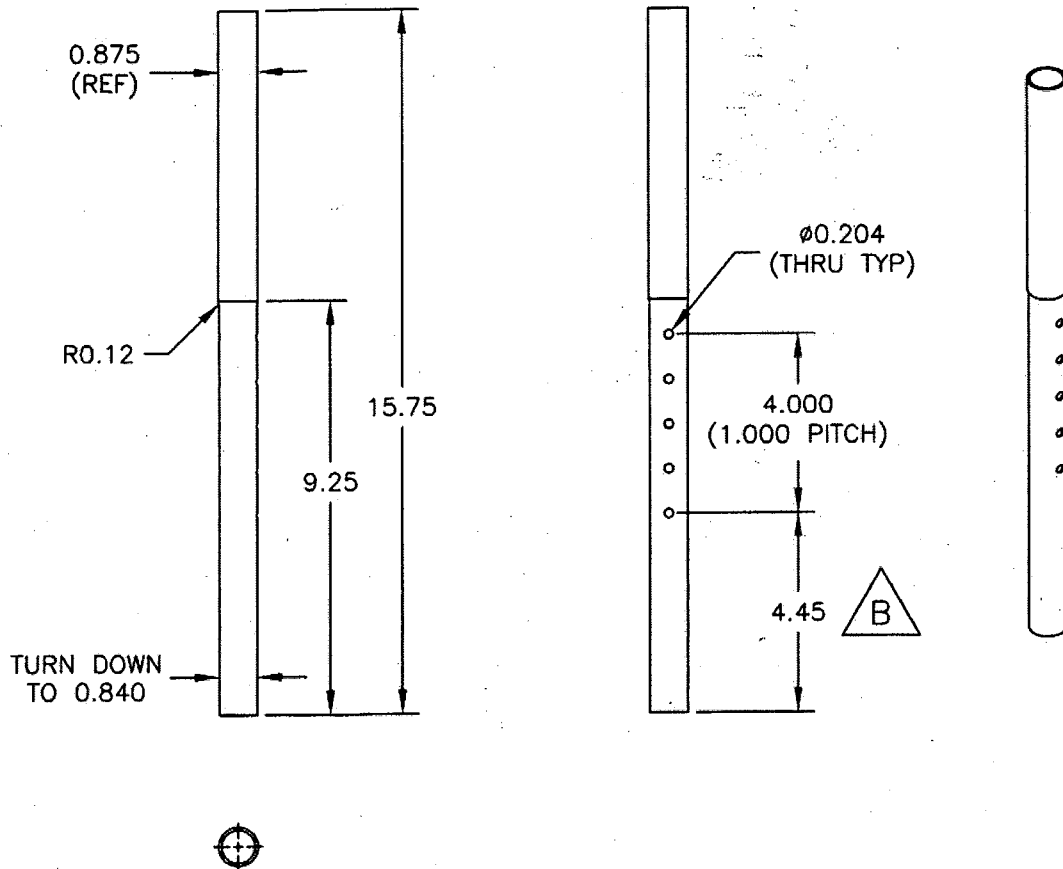
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WORK ORDER

DART

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DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

RELEASED
05-08-11 #1**D3304-1 TUBE****D3304-1 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE Ø0.875 x 0.065 WALL (REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

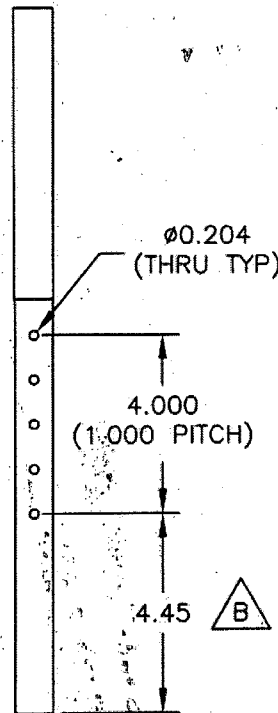
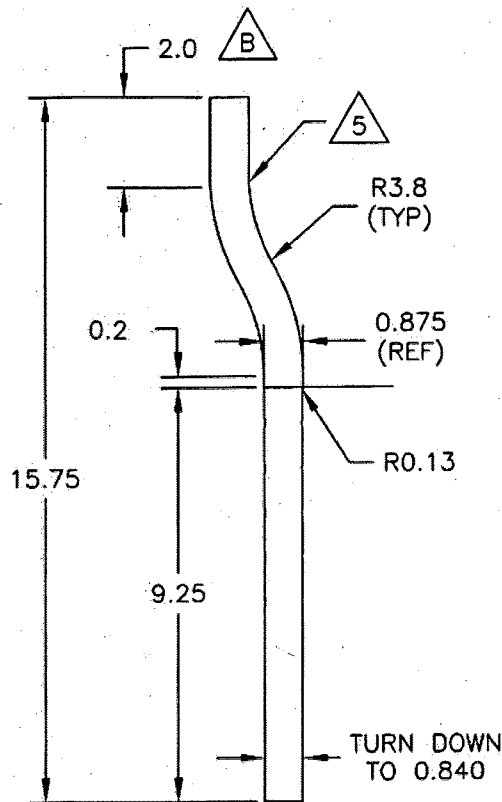
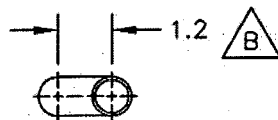
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DATE 05.07.15	TITLE TUBE ASSEMBLY		SCALE 1:4

**RELEASED**
05-08-11 *[Signature]***D3304-3 TUBE****D3304-3 NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE $\phi 0.875 \times 0.065$ WALL (REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

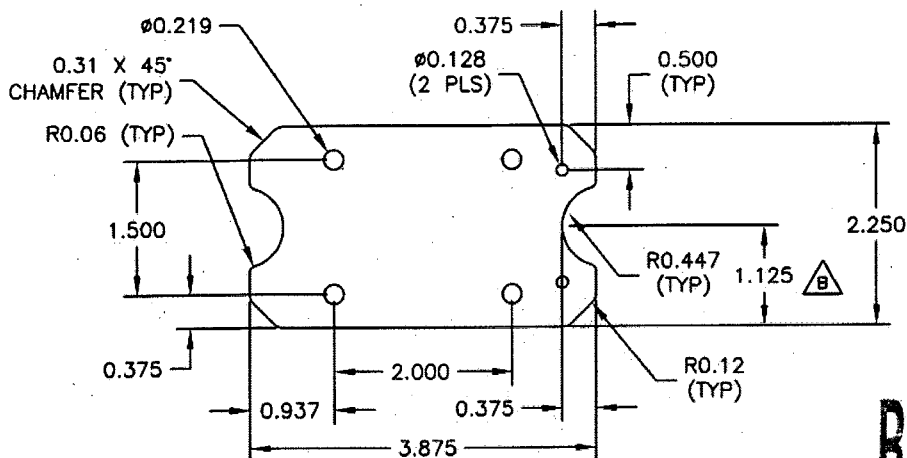
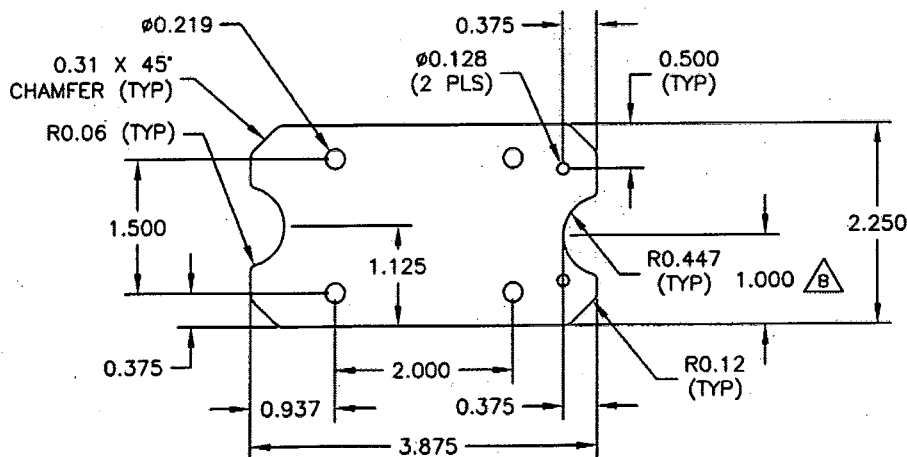
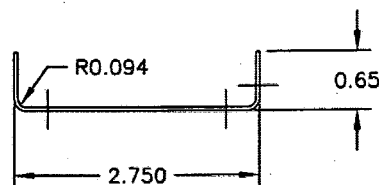
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3304	REV. B SHEET 4 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:2

**D3304-5 FLAT PATTERN****RELEASED**
05-08-11**D3304-7/-8 FLAT PATTERN****D3304-5/-7 BRACKET
D3304-8 OPPOSITE**

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NOTES:

- 1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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